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UNITED STATES CIVIL DEFENSE

THE RESCUE SERVICE



FEDERAL CIVIL DEFENSE ADMINISTRATION

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FOREWORD

This administrative guide is published to assist State and local civil defense organizations in organizing, selecting, equipping, and training rescue teams. Its contents supplement the general civil defense program set forth in *United States Civil Defense*,¹ published in September 1950. As conditions change and civil defense experience develops, this guide may be amended or superseded.

Rescue operations and techniques will be the subject of a separate publication, as will those fundamental principles of rescue with which the general public should be familiar.

¹ *United States Civil Defense*, 1950, NSRB Doc. 128; for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Price, 25 cents.

THE NEED FOR A RESCUE SERVICE

1.1 The function of the rescue service is to remove people from the wreckage of damaged or demolished structures. Personnel well equipped and trained for this function can save the lives of a large number of persons who might otherwise succumb as a result of injury, shock, or other causes. The speed with which a community could recover from an enemy attack would depend greatly on the effectiveness of the rescue service.

1.2 Manpower limitations and the need for adequate preparedness in a short time will not permit the development of as large a number of rescue teams as may be desired. It will be necessary, therefore, to train many persons in the fundamentals of rescue techniques so that, in an emergency, they can help themselves and others before the arrival of rescue teams which will be organized and trained to cope with the more difficult aspects of freeing people from collapsed or shattered structures. Prompt and efficient rescue work is a keystone of civil defense operations.

1.3 At no time in the past has the United States been faced with the necessity of rescuing the large number of people from damaged and demolished structures that would result from widespread air attack. No existing organization can be augmented to do rescue work on a large scale, in the same manner that we will expand our fire and police forces for civil defense purposes. Therefore, a new organization must be established to provide a large number of properly trained and equipped rescue workers.

1.4 An atomic bomb of the size used at Hiroshima (high air burst) could cause varying degrees of structural damage within an area of about 12 square miles, extending from ground zero over a radius of about 2 miles. The detonation of larger atomic bombs, or of more than one bomb over a metropolitan target, would result in much greater damage. We must not, however, confine our thinking to the kind

of destruction expected from an atomic blast. Different kinds of structural damage resulting from incendiary and high-explosive bombs must also be considered.

1.5 Rescue operations are physically exhausting and can be extremely hazardous. They must sometimes be conducted in the presence of live wires, open sewers, and broken illuminating-gas lines. In the event of radiological, biological, or gas warfare, rescue workers may be exposed to additional hazards. Therefore, they will need protective clothing, masks, and possibly other special equipment.

1.6 In organizing for civil defense we should profit as much as possible from our experiences in World War II. In the United States a rescue service was established in 1941 in the Citizens Defense Corps. *A Technical Manual for the Rescue Service* and *Handbook for Rescue Squads* were published, and two pilot rescue service training schools were set up. Fortunately, a widespread organization with a large number of rescue squads was not required in this country.

1.7 On the other hand, Great Britain was subjected to heavy bombing and developed a highly trained and efficient rescue service. In addition to volunteer workers, the British service included paid, full-time rescue parties that operated on two shifts 24 hours a day. The British rescue organization and techniques, adapted to postwar thinking, are valuable sources of information for us. Many of the suggestions presented in this guide are based upon British experience.

RESPONSIBILITY OF THE RESCUE SERVICE

2.1 The primary responsibility of the rescue service, operating with other civil defense forces, is to remove persons from places of entrapment. Many persons trapped in damaged structures after an attack may not be hurt except for nervous shock, or they may be injured or dead. A secondary responsibility of rescue teams is to render first aid to victims while they are being released. After release of trapped persons, medically supervised personnel will determine the need for their removal to first-aid stations or hospitals.

2.2 Because of the difficulty and delicacy of rescue operations in wartime disasters, rescue workers must be carefully and thoroughly trained. The morale of the people will depend largely on the rescue service—in knowing that if they are trapped in damaged buildings or under debris, skilled rescue workers will be able to reach them, remove them, and deliver them to the medical teams for treatment, if necessary.

POLICY

2.3 The suggested policy for rescue operations in State and local civil defense organizations may be summarized as follows:

- (a) The rescue service should be a separate operating entity.
- (b) All rescue workers should be trained and equipped in accordance with carefully developed standards so they can operate in areas unfamiliar to them, thus being able to assist in mutual aid and mobile support operations.
- (c) Rescue workers should be trained in first aid.
- (d) The nucleus of rescue teams should be drawn primarily from the trades dealing with the structural elements of buildings, supplemented by manual laborers. As enrollment progresses, it may be desirable to split up the original teams so as to distribute structural know-how among new rescue teams.

(e) Industrial establishments that have their own self-protection organization should organize rescue teams. They should coordinate their rescue programs with those of the community.

(f) The rescue service should depend upon the engineering services for the supply and operation of equipment not carried on the rescue vehicles. Heavy equipment, such as air compressors and cranes and their operators, should be supplied by the engineering services when required but placed at the operational direction of the rescue team leader.

(g) Within critical target areas, the rescue service should be organized operationally on the basis of municipal districts. (See ch. 3.) The boundaries of these districts should be determined by geography, population densities, and other factors. When a rescue team has been given a district as its primary responsibility, it should survey the structures and study the rescue problems that would be peculiar to the area. Shelter locations and other data of importance to civil defense operations should be indicated on maps.

(h) The rescue service should utilize the communications network set up in the warden service command posts.

(i) In mobile support areas, rescue teams should be organized as mobile support units.

FUNCTIONS

2.4 The primary functions of the rescue service include:

(a) Releasing persons who are trapped beneath debris or in damaged structures.

(b) Rendering essential first aid during the period of release of victims and subsequent transportation to the nearest safe location, where they can be cared for by litter-bearer teams or other first-aid personnel.

(c) Maintaining close coordination with all other civil defense services, particularly the medical, fire, engineering, and warden services.

(d) Providing temporary support or demolishing structures that may endanger life or hinder the operations of the rescue team or other services.

2.5 Secondary (or later-phase) functions of the rescue service will include:

(a) Recovering bodies from collapsed or damaged structures.

- (*b*) Releasing trapped animals.
- (*c*) Securing access to stores of clothing, medical supplies, food-stuffs, and other critical supplies.
- (*d*) Assisting the engineering services in the emergency repair of utility services or in the general clearance of debris.

ORGANIZATION OF THE RESCUE SERVICE

3.1 Rescue work is essentially an engineering operation. Therefore, it is desirable that the heads of the State and local civil defense rescue services should have engineering as well as administrative ability.

3.2 The State chief of rescue should:

(a) Assist the State civil defense director in subdividing the State for purposes of organization and administration of the rescue service.

(b) Assist in organizing municipal rescue services and the rescue squads which will form part of the State's mobile support plan.

(c) Disseminate information pertaining to the organization and techniques of the rescue service as supplied by the Federal Civil Defense Administration and other sources.

(d) Prepare and publish additional information helpful to the State and local rescue services.

(e) Acquire and distribute personal and organizational equipment for the rescue teams.

(f) Arrange working relationships between the rescue service and closely related civil defense services.

(g) Select qualified persons for training at the national technical training centers operated by the Federal Civil Defense Administration. These persons in turn will become instructors for the State and local rescue services.

(h) Provide training programs to supplement and extend those furnished by the Federal Civil Defense Administration in rescue and first aid.

3.3 Job descriptions suggesting the qualifications required for administrative and technical rescue personnel are given in the appendix.

3.4 It is suggested that advisory councils be set up to assist the State and local heads of the rescue services. These councils should be composed of persons familiar with the skills required in rescue work.

STATE CIVIL DEFENSE ORGANIZATION

3.5 Because of differences in the organization of State governments as well as geographic variations among the States, the exact composition of the State civil defense organization is a matter for each State to determine. Minimum uniformity, however, must be adhered to in order to facilitate mutual assistance and interstate support.

3.6 The larger and more populous States should be divided into civil defense sections in order to provide flexible operation and efficient coordination. Where State sections are established, they should be headed by sectional directors, who would be deputies to the State civil defense director. See map "State of Columbia: Typical division of State into Civil Defense sections" (fig. 1).

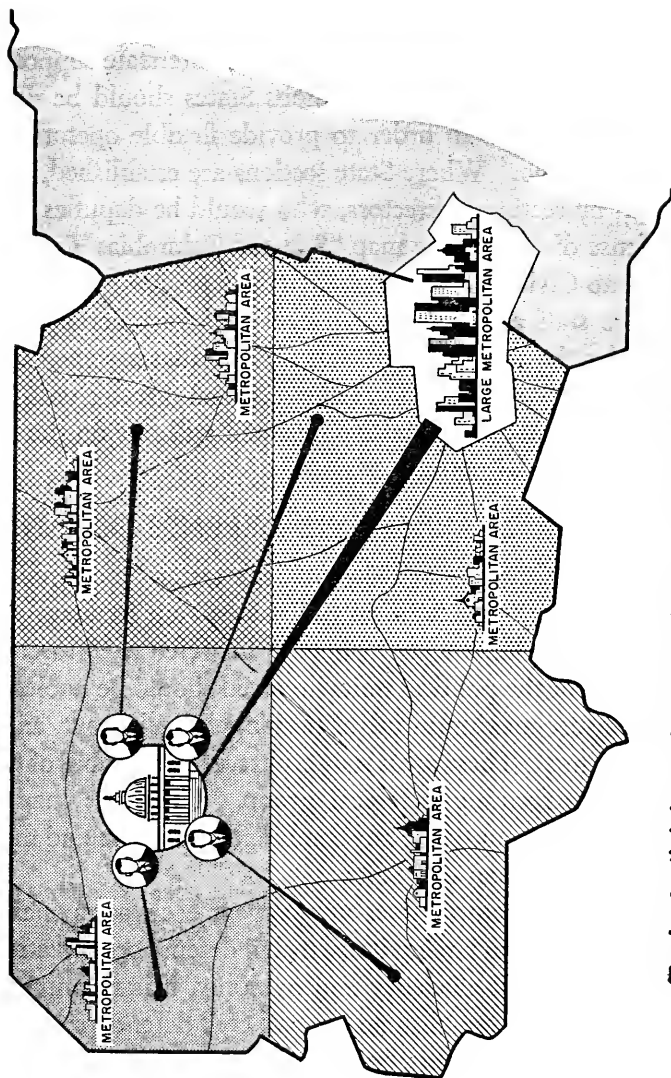
3.7 The staff at the sectional level will vary according to need, governed by the scope of civil defense activities assigned to sectional civil defense offices. In general, the sectional director will be assisted, if necessary, by an administrative staff and will rely on the State office for professional assistance.

METROPOLITAN AREA CIVIL DEFENSE ORGANIZATION

3.8 In planning for civil defense, the terms "metropolitan area," "mutual aid area," and "critical target area" are frequently used and in general are synonymous. These terms refer to an area in which the resources of the political units involved should be pooled and integrated to insure maximum use of personnel, equipment, and facilities for civil defense. These areas may embrace any number of contiguous political units forming a logical group. The units may be either municipalities or counties or any combination of them and may include portions of more than one State.

3.9 This arrangement does not prevent each component municipality or county from having its own civil defense organization. However, for the sake of efficiency and economy, it is recommended that these units agree to establish an over-all civil defense organization. A civil defense coordinating council with representation from all participating political units should be organized. The members of the council, who might well be the mayors, county chairmen, or other chief local officials, should appoint a director or coordinator of civil defense for the area as a whole. The coordinator should have charge of all civil defense activities and be responsible to the council.

STATE OF COLUMBIA



Typical division of State into Civil Defense Sections

FIGURE I.

3.10 In some instances, at the option of the Governor, certain metropolitan areas may be given status equal to that of the State civil defense sections. In these cases, it will simplify and improve liaison with the State organization if the director or coordinator is a representative of the State as well as the locality. (See fig. 2, which shows a typical State organization.)

3.11 Plans and agreements involving an area organization must not conflict with State and local laws. Interstate compacts must be in accord with provisions of the Federal Civil Defense Act of 1950.

LOCAL ORGANIZATION

3.12 The pattern of local organization for the operational services of civil defense is determined to a large extent by facilities for effective communications. Because it is static, the warden service is a logical framework around which a local communications network for civil defense operations may be developed.

3.13 As indicated in figure 2, a municipality may be incorporated in a county organization or may combine with other municipalities in a metropolitan area organization. There may be chiefs of rescue on the staffs of the civil defense directors (or coordinators) at each of these levels. Operational control of rescue teams may rest with any of these levels as a matter of local decision.

3.14 The metropolitan area or municipality will be subdivided into zones and districts. The size and shape of a zone will be determined not only by physical boundaries and normal political subdivisions, but also by proper evaluation of all the factors involved in developing a manageable unit of operations. Additional guidance in zonal development will be provided in *Principles of Civil Defense Operations*, a manual to be published by the Federal Civil Defense Administration.

3.15 The district will be the smallest subdivision utilized by the rescue service. (See fig. 3, which shows a typical local organization of the rescue service.) The area covered by a district may include a population of 10,000 to 50,000 people. In the center of most metropolitan areas this would cover roughly one square mile. Not more than 10 or 12 districts would be grouped together to form a zone. The operational boundaries of the zones or districts for rescue purposes should, to the greatest practical extent, be the same as for other civil defense services.

SUGGESTED MODELS OF STATE CIVIL DEFENSE ORGANIZATION

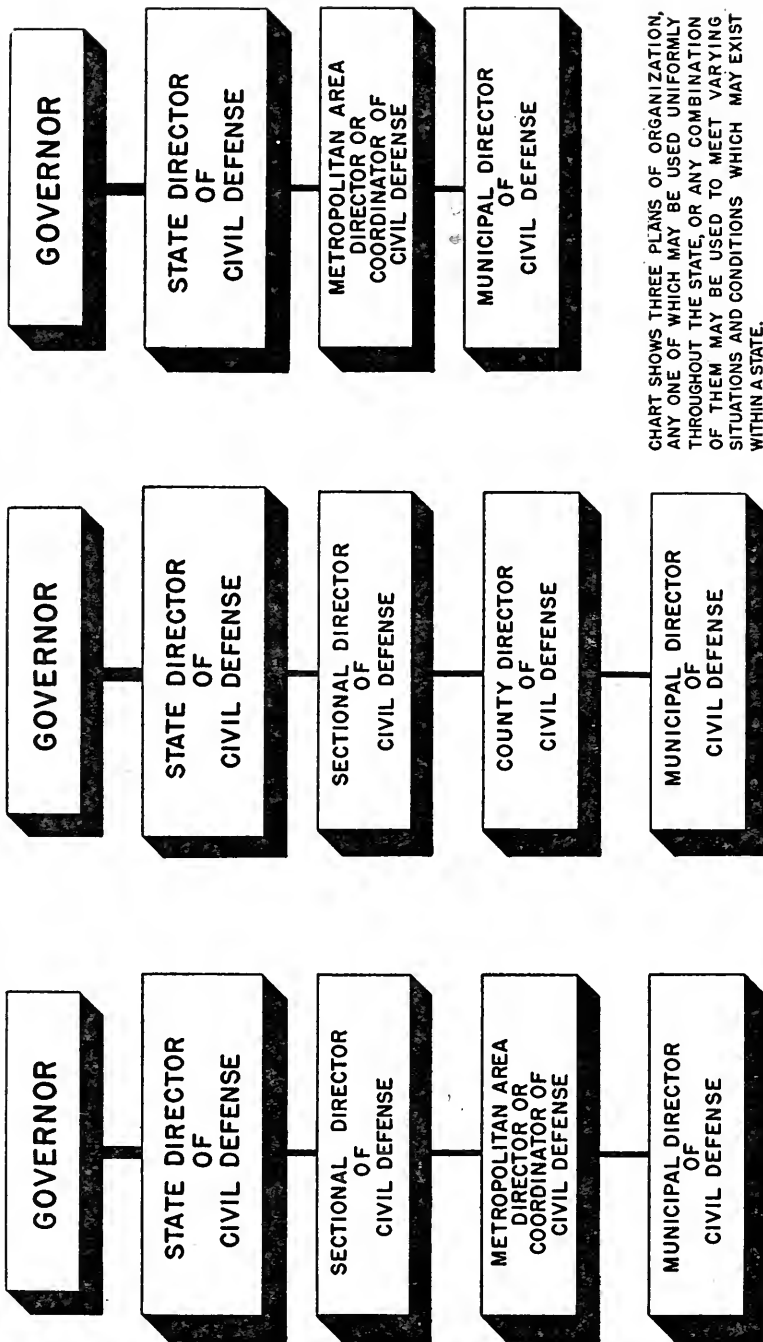
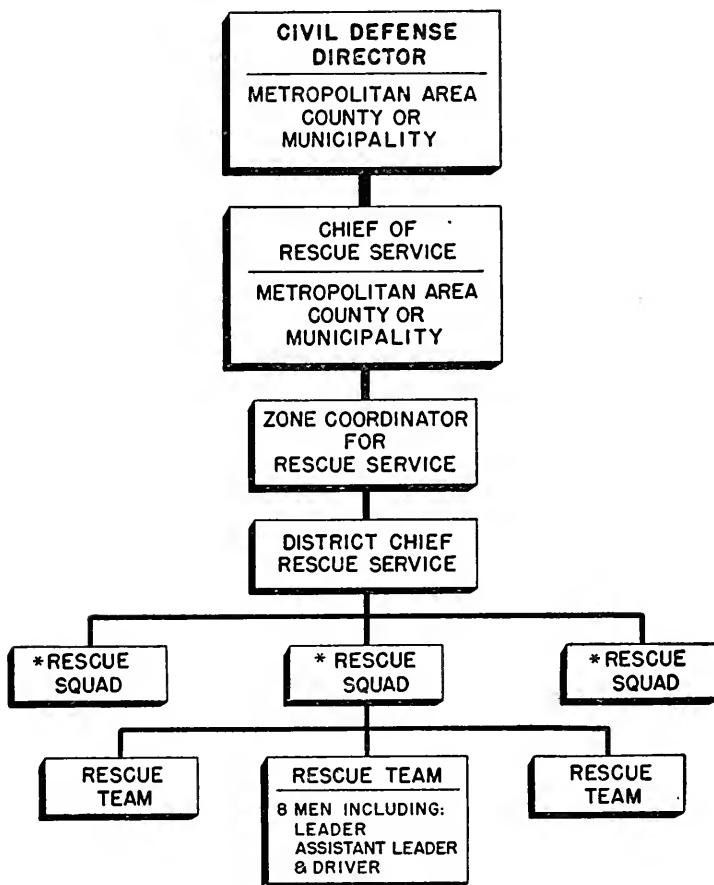


CHART SHOWS THREE PLANS OF ORGANIZATION, ANY ONE OF WHICH MAY BE USED UNIFORMLY THROUGHOUT THE STATE, OR ANY COMBINATION OF THEM MAY BE USED TO MEET VARYING SITUATIONS AND CONDITIONS WHICH MAY EXIST WITHIN A STATE.

FIGURE 2.—Typical State civil defense organization.

SUGGESTED ORGANIZATION OF LOCAL RESCUE SERVICE



* No of rescue squads reporting to a district dependent on total population and density of population within the district.

FIGURE 3.—Typical local rescue service organization.

3.16 Like the State chief of rescue, the local heads of the rescue service will be responsible for effectively organizing, training, and equipping rescue workers at their respective levels, and for maintaining liaison with other elements of civil defense. In addition, the district chief will be responsible for assigning personnel to form teams.

ANALYSIS OF NEEDS

3.17 One of the first jobs of the State chief of rescue will be to determine the number of rescue teams needed in his State.

3.18 About 90,000,000 people are in critical target areas in the United States. For planning purposes, the initial goal should be one rescue squad of 24 men for every 10,000 people in those areas. This will provide round-the-clock operation of three 8-man rescue teams using one unit of organizational equipment.

3.19 Rescue squads, at the outset, might be distributed in the proportions indicated below.

3.20 Cities with more than 100,000 population might have 1 squad for every 10,000 people.

3.21 Cities with unusually high population densities (20,000 or more persons per square mile) will require additional squads because of the serious rescue problems created by multistoried buildings. For example, a city with a density of 100,000 persons per square mile may need as many as 20 rescue squads per square mile, or 1 for every 5,000 people. It would not be advisable, however, to exceed a ratio of 1 for every 5,000 people in initial planning because proper organizing, equipping, and training—even on the over-all basis of 1 squad for every 10,000 persons—will require a tremendous effort.

3.22 Most of our large cities have varying population densities. For example, the Manhattan area in New York City has a daytime density of 145,000 persons per square mile, but only 76,000 persons per square mile at night. It will be necessary, therefore, to adjust the assignment of rescue workers so that teams can be readily assembled and dispatched to the affected area on a moment's notice.

3.23 Smaller communities in mobile support areas should organize rescue squads to be used in support operations. The number of squads will be determined by the State, based on local resources and geographic considerations.

3.24 Because the operational area of any rescue unit cannot be determined prior to an attack, the organization and equipment must be standardized so that the team or its equipment can be used wherever needed. It is desirable, however, for each squad to have an area of primary responsibility and to be intimately aware of rescue problems peculiar to the area.

3.25 A survey conducted by the squad in its assigned area will reveal the types of structures found there, the location of utilities, special problems created by underground fuel storage, and other factors that may hinder safe and speedy rescue operations.

3.26 The explosive force released by atomic bombs greatly exceeds that produced by the most powerful TNT bombs. The area of damage and number of casualties depend on many factors, such as the power of the bomb, and how it is exploded—whether at high or low altitude, under ground or water, or on a clear or stormy day.

3.27 Assumptions of atomic bomb casualties in American cities, as given in *Health Services and Special Weapons Defense*, issued by the Federal Civil Defense Administration, were based primarily on data derived from the two explosions in Japan of nominal atomic bombs—roughly equivalent to 20,000 tons of TNT. These bombs were exploded on a clear day at an altitude of approximately 2,000 feet—the height at which a nominal bomb is estimated to have the greatest effect.

3.28 If we assume the conditions that prevailed in the bombing of Hiroshima and Nagasaki, the casualties that might be expected in American cities can be estimated. The number of rescue teams required in an area following an airborne atomic attack has a direct relation to the casualties expected.

3.29 From a study of the number of casualties sustained by the atomic explosion at Hiroshima, it is estimated that in a similar situation in the United States 20,000 people might require rescue from places of entrapment.

3.30 Based on the assumptions in paragraph 3.18, a city with 250,000 people would normally have 25 rescue squads. However, because of the high population density in cities of this size, an additional 10 squads would probably have been assigned by the chief of the city rescue service. Ten more squads might be available from the support areas, making a total of 45.

3.31 On this basis there will be 45 squads to provide rescue service for as many as 20,000 persons, or approximately 1 squad for 445 persons. Obviously, the suggested number of rescue squads would be insufficient to cope with an extensive disaster. For this reason, training in the fundamentals of rescue operations should be given to all civil defense workers.

3.32 Ultimately, the civil defense organizations should plan for the training of far more rescue workers than the figures in this guide suggest—for several reasons. Some organized teams would be knocked out by the attack. Some of the trained rescue workers would not be available during an emergency because of illness, absence from home, or for other reasons. Since the rescue of an individual might take many hours, additional personnel for the rescue teams should be constantly enrolled and trained.

PERSONNEL AND EQUIPMENT

PERSONNEL

4.1 The desirable size of a rescue team is 8 men, including a leader, deputy leader, and driver. A team of this size should prove sufficient for most rescue operations. To provide for round-the-clock operations, it will be necessary to have 2 additional teams. The 3 teams, forming a rescue squad of 24 men, will use 1 unit of organizational equipment.

4.2 The rescue teams should include riggers, building wreckers, carpenters, steel and iron workers, miners, general construction foremen, and others familiar with the construction elements of buildings. These skilled men should be supplemented by manual laborers. Despite the need for skilled men, it is perhaps more important that rescue workers have common sense and good judgment and that the leader possess initiative and ability to get his men to operate as a team.

4.3 The specialized workers needed in rescue operations will generally be found in the construction industry. The larger contractors, with heavy construction equipment, will undoubtedly work with the civil defense engineering services. Building organizations that operate with little or no heavy equipment will provide a nucleus for staffing rescue teams.

4.4 Industrial plants that maintain their own civil defense organization will have rescue squads for duty in their immediate vicinity.

4.5 Persons normally in jobs vital to disaster operations, such as communications repairmen or waterworks maintenance men, should not be selected for general rescue work. Normal construction work, in general, will probably cease for some time after an attack.

4.6 Age is a consideration in enrolling rescue workers. Few men over 50 will have the required physical stamina, and many men under 30 will be needed for military service. Because the training of rescue

workers, individually and as teams, requires considerable time, the limited training facilities must be utilized to train persons who will be available when needed.

EQUIPMENT

4.7 Rescue equipment should consist of hand tools, carried on a special rescue truck similar to a power company's repair vehicle. Engineering studies now under way are aimed at developing a vehicle that is best suited to rescue operations and designed to carry the necessary tools.

4.8 The occasional needs of rescue teams for heavy construction equipment and material will be met by the engineering services. Arrangements should be worked out with the engineering services in preattack exercises for the use of certain equipment not immediately available.

4.9 The Federal Civil Defense Act of 1950 provides that "the amounts authorized to be contributed by the Administrator to each State for organizational equipment shall be equally matched by such State from any source it determines is consistent with its laws." The States and communities are expected to finance the entire cost of personal equipment.

4.10 Some months will elapse before rescue teams are adequately supplied with fully equipped rescue trucks. Meanwhile, measures must be taken to insure that rescue teams will be available for duty in the near future. Once a team is organized, it should start to collect the hand tools required for minimum operations.

4.11 The team, or squad, should be responsible for the care and safekeeping of its own equipment, which is costly and hard to replace.

4.12 The following list shows the type and quantity of equipment required for minimum operations. Generally, this equipment can be stored in tool boxes at the squad's assembly point and transported on a flat-bed truck.

4.13 Although limited Federal funds may be provided to the States on a matching basis for tools needed during interim training, many of the items in this list should be borrowed from State or municipal stocks. Tools that must be purchased can later be used to supplement the rescue truck equipment.

RESCUE SQUAD EQUIPMENT¹

<i>Item</i>	<i>Number per team</i>
Ax, fireman's, small, insulated-handle.....	4
Ax, single-bit, 4-pound.....	2
Bar, wrecking.....	4
Blanket.....	8
Block, snatch, single-sheave.....	2
Block and tackle:	
1-inch rope, 3-sheave.....	1
1-inch rope, 2-sheave.....	1
Boots, rubber..... pairs..	8
Brace and bits, wood:	
3/4-inch.....	1
1-inch.....	1
Extra bit.....	1
Buckets, GI, 12- or 14-quart.....	3
Chain:	
6-foot, 3/4-ton lift.....	2
6-foot, 2-ton lift.....	1
Chisel, cold:	
3/4- by 8-inch.....	1
3/4- by 12-inch.....	1
3/4- by 18-inch.....	1
Chisel, wood:	
3/4-inch.....	1
1-inch.....	1
Crowbar, 5-foot.....	2
Cutter, bolt.....	1
Cutter, pipe.....	1
Drinking-water container.....	1
First-aid kit, large.....	1
Hammer, claw.....	4
Hammer, mechanic's, 3-pound.....	1
Hammer, sledge:	
8-pound.....	1
16-pound.....	1
Hatchet.....	2
Jack, ratchet, 10-ton lift.....	1
Jack, small, 2-ton lift.....	2
Ladder, extension, 35-foot.....	1
Ladder, scaling.....	2
Mattock.....	4
Pick.....	4
Pliers, 6-inch or 8-inch.....	2

<i>Item</i>	<i>Number per team</i>
Pliers, wire-cutting.....	2
Rope, manila:	
1-inch diameter, 300 feet.....	1
¾-inch diameter, 300 feet.....	1
½-inch diameter, 500 feet.....	1
Rule, carpenter's.....	1
Saw, crosscut, 2-handle.....	1
Saw, hack, with blades.....	2
Saw, hand.....	2
Screw driver:	
8-inch.....	1
12-inch.....	1
Shovel:	
Round-pointed, short-handle.....	4
Square-pointed, short-handle.....	4
Stretcher, Army-type.....	4
Torch, acetylene-cutting, with cylinders.....	1
Wrench, pipe, Stillson:	
14-inch.....	1
18-inch.....	1

¹ This list covers only those items which the team should collect before acquiring the rescue truck and its complete complement of tools.

TRAINING OF RESCUE WORKERS

5.1 Intensive training of rescue workers, both individuals and in teams, is of paramount importance. Well-trained teams would save many lives, but untrained rescue workers would endanger themselves and the casualties they were trying to remove.

5.2 The Federal Civil Defense Administration plans to set up three Federal training centers where rescue techniques and other basic civil defense subjects will be taught. The States will be asked to select and send to these centers persons who have the necessary background for rescue work and are capable of teaching others. These trainees can then be used to teach other rescue instructors in the States and municipalities.

5.3 Instructors in rescue should be qualified to teach the fundamentals of rescue techniques to the general public, as well as the specialized rescue techniques utilized by the well-equipped rescue teams.

5.4 The rescue training grounds will be an important training aid at each of the Federal training centers. Included will be a "Rescue Street" that will contain residential and commercial structures in various stages of collapse—including rubble inside and outside the buildings—to simulate the conceivable situations from which persons may have to be rescued.

5.5 Instruction in rescue techniques offered by the States and local communities should be as practical as possible. The skilled members of the teams, such as carpenters, bricklayers, and other specialists, must be taught the specific techniques of rescue work.

5.6 States and populous critical target areas should provide full-scale training aids for the practical instruction of their rescue workers. The Federal Civil Defense Administration will assist States and cities in devising training aids.

5.7 Instruction in first aid is essential for all rescue workers. This will generally be provided in the local communities by the Red Cross. For civil defense purposes the techniques applicable to the rapid treatment of a large number of casualties, as well as the proper methods of handling casualties in restricted areas, should be emphasized.

5.8 The Federal Civil Defense Administration plans to issue (1) a handbook on rescue techniques for the use of rescue workers, and (2) a manual for the general public to familiarize people with the duties of rescue teams and to enable them to assist each other before the arrival of fully trained and equipped rescue workers.

STANDARD JOB DESCRIPTIONS

State Chief of Rescue Service.

Metropolitan Area Coordinator of Rescue Service.

Municipal Chief of Rescue Service.

District Chief of Rescue Service.

Leader and Deputy Leader, Rescue Team.

Member, Rescue Team.

STATE CHIEF OF RESCUE SERVICE

SUMMARY

The State chief of rescue service will be an official appointed by the State civil defense director and responsible for organizing, training, and equipping the State's rescue service. He will be provided with a sufficient staff to perform properly the mission of the rescue service, namely, removing trapped persons from damaged or demolished buildings and rendering first aid whenever necessary before the removal of casualties.

DUTIES

Preattack.—He will organize a State rescue service generally in accordance with the organizational pattern suggested by the Federal Civil Defense Administration, with modifications to fit the particular needs of the State; provide training facilities at the State level for practical instruction of rescue team personnel; provide personnel suitable for instructing rescue techniques at the State and municipal levels; determine the number of rescue squads needed throughout the State, within critical target areas, and as mobile support units; provide a continuing program of realistic exercises in conjunction with other elements of civil defense; and provide the Federal Civil Defense Administration with detailed reports of the State's rescue service so that a sound basis may be developed for matching funds.

Postattack.—He will be responsible for the dispatch of mobile support units, upon call, from command channels.

QUALIFICATIONS

Training and experience.—In order to perform properly the duties described, he should possess a high degree of administrative ability and be well-versed in the general field of engineering.

Physical requirements.—Sufficient for normal executive duties.

Adaptability.—The position requires considerable ability to deal with others, as well as a high degree of supervision and leadership in time of emergency.

Availability.—The position should be set up for full-time service both before and during an emergency.

METROPOLITAN AREA COORDINATOR OF RESCUE SERVICE

SUMMARY

The metropolitan area coordinator of the rescue service will be appointed by the metropolitan area civil defense director, in consultation with the State chief of rescue service and be responsible for coordinating the organization, training, and equipping of the rescue service within the several municipalities making up the metropolitan area.

DUTIES

Preattack.—He will assist the State chief in determining the number of rescue squads required throughout the metropolitan area; coordinate the activities of the several municipalities; develop working arrangements for the use of rescue training facilities; and assist in providing personnel suitable for teaching rescue techniques. As a staff member of the metropolitan area civil defense organization, he will provide not only a continuing program of realistic exercises in conjunction with other elements of civil defense but also detailed reports to the State chief so that a sound basis may be developed for matching funds.

Postattack.—He will be responsible for directing the dispatch of rescue squads throughout the metropolitan area, as required; for requesting assignment, through the State civil defense director, of additional rescue squads from mobile support areas when necessary; and for providing general supervision of rescue operations.

QUALIFICATIONS

Training and experience.—In order to perform the duties described above, he should have administrative experience in either civil engineering, architecture, or general contracting. He should be able to speak before large groups.

Physical requirements.—Sufficient for normal executive duties.

Adaptability.—The position requires considerable ability to deal with others, as well as a high degree of supervision and leadership in time of emergency.

Availability.—The position should be set up for full-time service both before and during an emergency.

MUNICIPAL CHIEF OF RESCUE SERVICE

SUMMARY

The municipal chief of the rescue service will be appointed by the municipal civil defense director and be responsible for organizing, training, and equipping the municipal rescue service. He will be provided with a sufficient staff to perform properly the mission of the rescue service; namely, removing trapped persons from damaged or demolished buildings and rendering first aid whenever necessary before the removal of casualties.

DUTIES

Preattack.—He will organize a municipal rescue service generally in accordance with the organizational pattern suggested by the Federal Civil Defense Administration but modified to suit the particular needs of the municipality; provide training facilities for the practical instruction of rescue squads; provide personnel suitable for teaching techniques throughout the districts; assist the municipal civil defense director in providing a continuing program of realistic exercises in conjunction with other elements of civil defense; provide higher officials of the rescue service with detailed reports so that a sound basis may be developed for matching funds.

Postattack.—He will be responsible for directing the dispatch of rescue teams throughout the municipality, as required; for requesting assignment, through the municipal civil defense director, of additional teams from mutual aid or mobile support areas when necessary; for providing liaison between the rescue teams and other municipal civil defense services; and for providing general supervision of rescue operations.

QUALIFICATIONS

Training and experience.—In order to perform properly the duties described, he should have administrative experience in either civil engineering, architecture, or general contracting. The municipal chief of the rescue service should possess, to a considerable extent, the ability to speak before large groups.

Physical requirements.—Sufficient for normal executive duties.

Adaptability.—The position requires considerable ability to deal with others, as well as a high degree of supervision and leadership in time of emergency.

Availability.—The position should be set up for full-time service both before and during an emergency.

DISTRICT CHIEF OF RESCUE SERVICE

SUMMARY

The district chief of rescue service is responsible for organizing and training the rescue squads assigned to a district.

DUTIES

Preattack.—He assists in organizing rescue teams; supervises training in rescue techniques; insures that a team is fully informed as to the location and possible hazards in the more important structures and shelters within the team's area of primary responsibility; coordinates the team's training with that of other civil defense elements in the district; is responsible for insuring that the teams under his supervision have an effective organization over a 24-hour period and that their equipment is properly maintained; assists in providing training facilities for the practical application of rescue techniques; and provides instructional assistance in the training of all civil defense workers in basic rescue.

Postattack.—He dispatches rescue teams under his command in accordance with directions from headquarters; provides liaison between the rescue teams and other civil defense services working in the area, or from which assistance may be required; coordinates relief forces when required during lengthy rescue operations; provides general supervision of rescue operations, assigns rescue teams available through mutual aid or mobile support, and is responsible for feeding and housing arrangements for teams assigned to a district from outside areas.

QUALIFICATIONS

Training and experience.—He should possess a vocational background in either engineering, architecture, general contracting, or military construction. In addition, he should be familiar with safety techniques as applicable to rescue work; emergency handling of utilities, such as gas, electric, water, and sewage lines; and first-aid techniques. He should possess, at least to a limited extent, the ability to instruct teams in practical rescue techniques and to speak before small groups of persons.

Physical requirements.—The person selected should be generally physically fit, not over 50 years old, and not subject to military service. A person whose normal occupation requires him to carry on regular duties in time of disaster, such as maintenance men employed in communication and public utility fields, should not be selected for this position.

Adaptability.—The position requires considerable ability to deal with others, as well as supervision and leadership in times of emergency.

Availability.—He should be able to devote 16 hours per month during the training period; full time under disaster conditions.

LEADER AND DEPUTY LEADER, RESCUE TEAM

SUMMARY

The leader and deputy leader of a rescue team should be selected on the same basis since the deputy leader will, in the absence of the leader, direct the operations. They are responsible for leading a rescue team of eight men.

DUTIES

Preattack.—They assist in organizing rescue teams; direct the training of team members in rescue techniques; provide the team with detailed information concerning the more important structures and shelters from which rescue may be effected in the team's area of primary responsibility; conduct practical rescue and first-aid training exercises; coordinate the team with other elements of civil defense; and are responsible for the proper use and maintenance of rescue vehicles and equipment.

Postattack.—They determine the extent of a particular rescue operation and direct it; determine and report to their superior the amount of assistance required by the team, either in manpower or in mechanical equipment; indicate precautions to safeguard their lives and those of the casualties during rescue; supervise first-aid treatment; and are responsible (1) for tagging a casualty as to type of injury, treatment given, place where found, identification, and (2) for seeing that he is turned over to the proper authorities for further treatment.

The rescue team leader is responsible for the rescue vehicle, its equipment, and any other equipment or manpower assigned to him during a rescue operation.

QUALIFICATIONS

Training and experience.—In order to perform properly the duties described, the team leader and the deputy leader should have a background in general contracting, military construction, or a common building trade, such as building wrecker, rigger, carpenter, bricklayer, structural iron worker, member of an organized rescue team, or miner. In addition, they should be familiar with shoring techniques and heavy timbering; safety techniques, as applicable to rescue operations; acetylene cutting; emergency handling of utilities, such as gas, electric, water, and sewage lines; care and maintenance of pertinent mechanical equipment and tools; and first-aid techniques. The leader should possess, at least to a limited extent, ability to instruct members of his team in practical rescue techniques.

Physical requirements.—Rescue work requires calm judgment and is arduous and physically exhausting. Persons whose occupation necessitates their carrying on regular duties in time of disaster, such as maintenance men employed in communication and public utility fields, should not be selected.

Adaptability.—The positions require considerable ability to deal with others, as well as supervision and leadership in time of emergency.

Availability.—They should be able to devote 16 hours per month during training period; full-time work is required under disaster conditions.

MEMBER, RESCUE TEAM

SUMMARY

Under the direction of the leader or deputy leader, a team member will assist in carrying out rescue missions; namely, removing trapped persons from damaged or demolished buildings and rendering first-aid treatment whenever necessary, before the removal of casualties.

DUTIES

Preattack.—Under the direction of the leader, the team member will participate in training in rescue techniques and first aid; become proficient in the use of equipment carried on the rescue vehicle; and assist in general maintenance of the vehicle and its equipment.

Postattack.—Under direction of the leader, a team member will assist in rescuing trapped casualties; observe principles of safety in conducting rescue operations; provide first-aid treatment to casualties

when necessary; and assist in properly tagging a casualty as to type of injury, treatment given, where found, and identification.

QUALIFICATIONS

Training and experience.—In order to perform properly the duties described, the team member should have a background in general contracting, military construction, or common building trades, such as building wrecker, rigger, carpenter, bricklayer, structural iron worker, member of an organized rescue team, miner, and heavy construction worker. In addition, he should be familiar with shoring techniques and heavy timbering; safety techniques as applicable to his vocation; acetylene cutting; emergency handling of utilities, such as gas, electric, water, and sewage lines; care and maintenance of pertinent mechanical equipment and tools; and first-aid techniques. It is recognized that rescue teams eventually will include individuals without experience in the skills mentioned above. Anyone possessing the required physical stamina could be trained for rescue work.

Physical requirements.—Rescue work requires calm judgment in time of emergency and is arduous and physically exhausting. Persons, such as maintenance men employed in communication and public utility fields, whose normal occupation necessitates their carrying on regular duties in time of disaster, should not be selected.

Adaptability.—Position requires moderate ability to deal with others, as well as considerable stamina and calm temperament during an emergency.

Availability.—He should be able to devote 16 hours per month during the training period; full-time work is required under disaster conditions.



